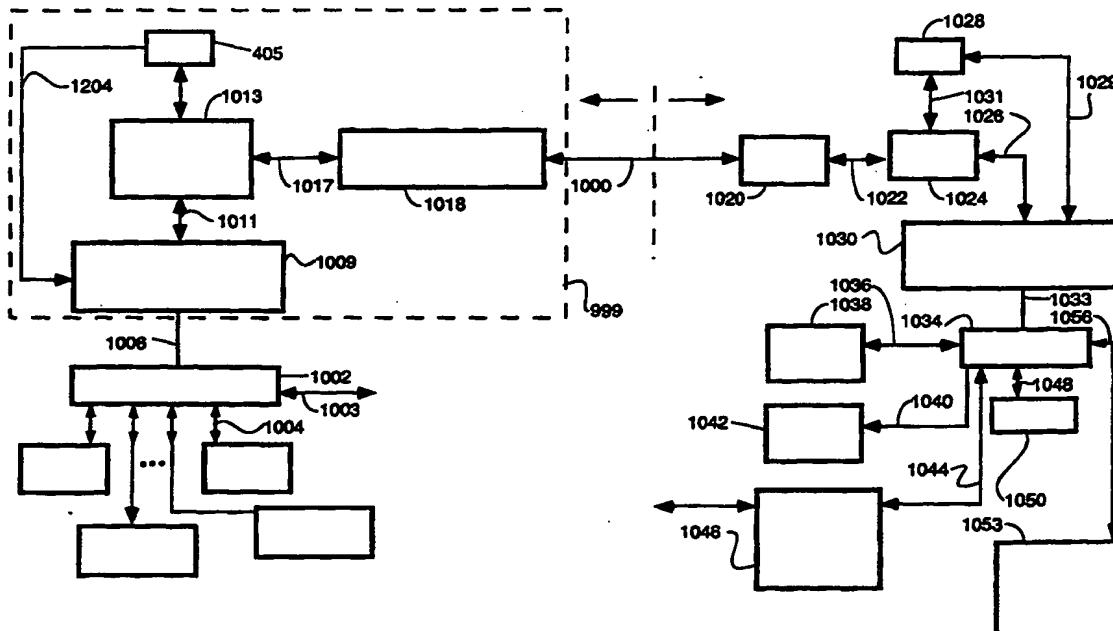


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## (54) Title: DATA TRANSMISSION USING ATM OVER HYBRID FIBER COAX



## (57) Abstract

A process for reducing the amount of overhead data in ATM cell header prior to transmission upstream and downstream on a hybrid fiber coax cable plant (1003) or other transmission media using SCDMA on at least the upstream path, with out loss of either IP or Ethernet addressing information. Optimized downstream communication is achieved by establishing a virtual link between each remote unit and a central unit using dedicated SCDMA spreading codes assigned only to that virtual link.